# FOIL when $A \neq 1$ SLTN (version 105)

**FOIL the expressions shown below:**

1. $(-9x - 8)(-8x + 9)$

$$(-9)(-8)x^2 + (-9)(9)x + (-8)(-8)x + (-8)(9)$$
$$(72)x^2 + (-81)x + (64)x + (-72)$$
$$72x^2 - 17x - 72$$

2. $(7x - 3)(-4x - 8)$

$$(7)(-4)x^2 + (7)(-8)x + (-3)(-4)x + (-3)(-8)$$
$$(-28)x^2 + (-56)x + (12)x + (24)$$
$$-28x^2 - 44x + 24$$

3. $(7x - 2)(8x + 2)$

$$(7)(8)x^2 + (7)(2)x + (-2)(8)x + (-2)(2)$$
$$(56)x^2 + (14)x + (-16)x + (-4)$$
$$56x^2 - 2x - 4$$

4. $(-8x + 4)(2x + 6)$

$$(-8)(2)x^2 + (-8)(6)x + (4)(2)x + (4)(6)$$
$$(-16)x^2 + (-48)x + (8)x + (24)$$
$$-16x^2 - 40x + 24$$

5. $(7x + 3)(-4x + 2)$

$$(7)(-4)x^2 + (7)(2)x + (3)(-4)x + (3)(2)$$
$$(-28)x^2 + (14)x + (-12)x + (6)$$
$$-28x^2 + 2x + 6$$

**FOIL the expressions shown below:**

6. $(2x + 3)(-3x - 5)$

$$(2)(-3)x^2 + (2)(-5)x + (3)(-3)x + (3)(-5)$$
$$(-6)x^2 + (-10)x + (-9)x + (-15)$$
$$-6x^2 - 19x - 15$$

7. $(-7x + 7)(-7x - 9)$

$$(-7)(-7)x^2 + (-7)(-9)x + (7)(-7)x + (7)(-9)$$
$$(49)x^2 + (63)x + (-49)x + (-63)$$
$$49x^2 + 14x - 63$$

8. $(-6x + 5)(3x + 5)$

$$(-6)(3)x^2 + (-6)(5)x + (5)(3)x + (5)(5)$$
$$(-18)x^2 + (-30)x + (15)x + (25)$$
$$-18x^2 - 15x + 25$$

9. $(-8x + 8)(5x + 4)$

$$(-8)(5)x^2 + (-8)(4)x + (8)(5)x + (8)(4)$$
$$(-40)x^2 + (-32)x + (40)x + (32)$$
$$-40x^2 + 8x + 32$$

10. $(8x + 3)(5x + 5)$

$$(8)(5)x^2 + (8)(5)x + (3)(5)x + (3)(5)$$
$$(40)x^2 + (40)x + (15)x + (15)$$
$$40x^2 + 55x + 15$$